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NOTICE OF ALLOWANCE AND FEE(S) DUE

92030   7590   09/22/2011

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West
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CANADA

EXAMINER
WANG, BEN C

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 09/22/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,490	03/01/2004	Viera Bibr	T846804 1US	9028

TITLE OF INVENTION: SYSTEM AND METHOD FOR BUILDING WIRELESS APPLICATIONS WITH INTELLIGENT MAPPING BETWEEN USER INTERFACE AND DATA COMPONENTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	12/22/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 02/11)

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: <u>Mail</u>   Mail Stop ISSUE FEE
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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

92030   7590   09/22/2011

Gowling Lafleur Henderson LLP
Suite 1600 1 First Canadian Place 100 King Street
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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,490	03/01/2004	Viera Bibr	T8468041US	9028

TITLE OF INVENTION: SYSTEM AND METHOD FOR BUILDING WIRELESS APPLICATIONS WITH INTELLIGENT MAPPING BETWEEN USER INTERFACE AND DATA COMPONENTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	12/22/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
WANG, BEN C	2192	717-107000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address Form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) :   ☐ Individual   ☐ Corporation or other private group entity   ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.   ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,490	03/01/2004	Viera Bibr	T8468041US	9028

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 433 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 433 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 02/11)

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)
Notice of Allowability	10/788,490	BIBR ET AL.
	Examiner	Art Unit
	BEN WANG	2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _the amendment filed September 13, 2011_.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are _1-36 and 38-47 (renumber as 1-46)_.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

      a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

          1. ☐ Certified copies of the priority documents have been received.

          2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

          3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the
              International Bureau (PCT Rule 17.2(a)).

     * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08),
    Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit
    of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
    Paper No./Mail Date _____.

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

/Thuy Dao/	/Ben C Wang/
Primary Examiner, Art Unit 2192	Examiner, Art Unit 2192

DETAILED ACTION

1.   A request for continued examination under 37 CFR 1.114, including the

fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114,

and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the

previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on September 13, 2011 has been entered.

2.   Applicant's amendment dated September 13, 2011, responding to the final

Office action mailed April 13, 2011 provided in the rejection of claims 1-36 and

38-47, wherein claims 1, 18, 35, 36, and 38 have been amended.

EXAMINER'S AMENDMENT

3.   An examiner's amendment to the record appears below. Should the

changes and/or additions be unacceptable to applicant, an amendment may be

filed as provided by 37 CFR 1.312. To ensure consideration of such an

amendment, it MUST be submitted no later than the payment of the issue fee.

4.   Authorization for this examiner's amendment was given in a telephone

interview with Mr. Simon B. Anolick (Reg. No. 37,585) on September 19, 2011 to

further amend claims 1, 35, 36, and 38 respectively (see Examiner's Amendment

below) and thus to obviate any potential 35 U.S.C 101 and/or 35 U.S.C 112,

second paragraph issues and to place the claims in the condition for allowance.

A proposed claims amendment has received and adopted by the examiner.

5.   The application has been amended as follows:

IN THE CLAIMS,

Please amend claims 1, 35, 36, and 38 as follows:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method <u>executed by a processor operating on a wireless device</u> for generating a screen element, based on a data object, of a component application executing on [[a]] <u>the</u> wireless device for display on a user interface of the wireless device, the component application including a data component having at least one data field definition and a screen component having at least one screen element definition, the components being defined in a structured definition language, the method comprising the steps of:

selecting the screen component corresponding to the screen element selected for display;

identifying at least one mapping present in the screen component, the mapping for specifying dynamic relationships between the screen component and the data component as defined by an identifier representing the mapping;

wherein a mapping manager maintains dynamic data integrity and automatically synchronizes changes between the screen component and the corresponding data component and vice versa in a runtime environment;

selecting the data component mapped by the mapping according to the mapping identifier;

obtaining a data object field value corresponding to the data field definition of the mapped data component;

generating a screen element from the screen element definition to include
the data object field value according to the format of the data field definition as
defined in the mapped data component.

2. (original) The method according to claim 1, wherein a plurality of the data field
definitions of the data component is shared between the screen component and
the data component as represented by the mapping.

3. (original) The method according to claim 2 further comprising the step of
linking the plurality of data field definitions to corresponding ones of the screen
element definitions of the screen component as represented by the identifier.

4. (original) The method according to claim 2 further comprising the step of
detecting a user event of the user interface related to the screen element.

5. (original) The method according to claim 4 further comprising the step of
identifying the mapping in the screen component corresponding to the linked
data component of the affected screen element.

6. (original) The method according to claim 5 further comprising the step of
updating the data object in a memory using the data field definition of the linked
data component.

7. (original) The method according to claim 5 further comprising the step of
creating a new one of the data object in a memory using the data field definition
of the linked data component.

8. (previously presented) The method according to claim 2, wherein the data
object field value is obtained by being passed to the user interface as a
parameter.

9. (original) The method according to claim 2, wherein a first screen element definition is mapped by a first one of the identifiers to a first one of the data components and a second screen element definition is mapped by a second one of the identifiers to a second one of the data components different from the first data component.

10. (original) The method according to claim 9, wherein the first screen element definition and the second screen element definition are mapped to the same data component using the first identifier.

11. (original) The method according to claim 2, wherein the structured definition language is XML based.

12. (original) The method according to claim 2, wherein the identifier is a simple primary key.

13. (original) The method according to claim 2, wherein the identifier is a composite key.

14. (original) The method according to claim 2 further comprising the step of receiving an asynchronous communication message by the device via a network coupled to the device, the message including a message data object.

15. (previously presented) The method according to claim 14 further comprising the step of checking the asynchronous communication message for the mapping corresponding to the data component of the application provisioned on the device.

16. (previously presented) The method according to claim 15 further comprising the step of updating the data component in accordance with the message and then reflecting the update in the screen element linked to the data component.

17. (original) The method according to claim 15 further comprising the step of creating the data object corresponding to the message in a memory using the data field definition of the linked data component.

18. (previously amended) A system for generating a screen element, based on a data object, of a component application executing on a wireless device, for display on a user interface of the wireless device, the component application including a data component having at least one data field definition and a screen component having at least one screen element definition, the components being defined in a structured definition language, the system having memory for storing computer readable instructions and a processor configured to executed the instructions, the instructions for providing:

     a mapping manager for identifying at least one mapping present in the screen component, the mapping for specifying dynamic relationships between the screen component and the data component as defined by an identifier representing the mapping, and for selecting the data component mapped by the mapping according to the mapping identifier and wherein the mapping manager maintains dynamic integrity and automatically synchronizes changes between the screen component and the corresponding data component and vice versa in a runtime environment;

     a data manager for obtaining a data object field value corresponding to the data field definition of the mapped data component; and

     a presentation manager for generating a screen element from the screen element definition to include the data object field value according to the format of the data field definition as defined in the mapped data component.

19. (original) The system according to claim 18, wherein a plurality of the data field definitions of the data component is shared between the screen component and the data component as represented by the mapping.

20. (original) The system according to claim 19, wherein the plurality of data field definitions are linked to corresponding ones of the screen element definitions of the screen component as represented by the identifier.

21. (previously presented) The system according to claim 19 wherein the presentation manager is further configured for detecting a user event of the user interface related to the screen element.

22. (previously presented) The system according to claim 21 wherein the mapping manager is further configured for identifying the mapping in the screen component corresponding to the linked data component of the related screen element.

23. (previously presented) The system according to claim 22 wherein the data manager is further configured for updating the data object in a memory using the data field definition of the linked data component.

24. (previously presented) The system according to claim 22 wherein the data manager is further configured for creating a new one of the data object in a memory using the data field definition of the linked data component.

25. (previously presented) The system according to claim 19, wherein the data object field value is obtained by being passed to the user interface as a parameter.

26. (original) The system according to claim 19, wherein a first screen element definition is mapped by a first one of the identifiers to a first one of the data components and a second screen element definition is mapped by a second one of the identifiers to a second one of the data components different from the first data component.

27. (original) The system according to claim 26, wherein the first screen element definition and the second screen element definition are mapped to the same data component using the first identifier.

28. (previously presented) The system according to claim 19, wherein the structured definition language is Extensible Markup Language (XML) based.

29. (original) The system according to claim 19, wherein the identifier is a simple primary key.

30. (original) The system according to claim 19, wherein the identifier is a composite key.

31. (original) The system according to claim 19 further comprising a communication manager for receiving an asynchronous communication message by the device via a network coupled to the device, the message including a message data object.

32. (previously presented) The system according to claim 19 wherein the mapping manager is further configured for checking the message for the mapping corresponding to the data component of the application provisioned on the device.

33. (previously presented) The system according to claim 32 wherein the data manager is further configured for updating the data component in accordance with the message and then reflecting the update in the screen element linked to the data component.

34. (previously presented) The system according to claim 32 further comprising the data manager configured for creating the data object corresponding to the message in a memory using the data field definition of the linked data component.

35. (currently amended) A method executed by a processor of a wireless device for generating a data object of a component application executing on [[a]] the wireless device based on a change in a screen element displayed on a user interface of a wireless device, the component application including a data component having at least one data field definition and a screen component having at least one screen element definition, the components being defined in a structured definition language, the method comprising the steps of:

selecting the screen component corresponding to the screen element;

identifying at least one mapping present in the screen component, the mapping for specifying dynamic relationships between the screen component and the data component;

wherein a mapping manager maintains dynamic integrity and automatically synchronizes changes between the screen component and the corresponding data component and vice versa in a runtime environment;

selecting the data component mapped by the mapping;

obtaining a changed value from the screen element corresponding to the mapped data component;

assigning the changed value to a data field value of the data object according to the format of the data field definition as defined in the mapped data component.

36. (currently amended) A wireless device <u>having a processor</u> for generating a screen element, based on a data object, of a component application executing on the wireless device for display on a user interface of the wireless device, the component application including a data component having at least one data field definition and a screen component having at least one screen element definition, the components being defined in a structured definition language, the wireless device comprising:

means for selecting the screen component corresponding to the screen element selected for display;

means for identifying at least one mapping present in the screen component, the mapping for specifying dynamic relationships between the screen component and the data component;

a mapping manager to maintain dynamic integrity and automatically synchronize changes between the screen component and the corresponding data component and vice versa in a runtime environment;

means for selecting the data component mapped by the mapping;

means for obtaining a data object field value corresponding to the data field definition of the mapped data component;

means for generating a screen element from the screen element definition to include the data object field value according to the format of the data field definition as defined in the mapped data component.

37. (cancelled)

38. (currently amended) A <u>non-transitory</u> computer readable medium comprising instructions for generating a screen element, based on a data object, of a component application executing on a wireless device for display on a user interface of the wireless device, the component application including a data component having at least one data field definition and a screen component

having at least one screen element definition, the components being defined in a
structured definition language, the instructions, when implemented on a
computing device, cause the computing device to implement the steps of:

selecting the screen component corresponding to the screen element
selected for display;

identifying at least one mapping present in the screen component, the
mapping for specifying dynamic relationships between the screen component
and the data component as defined by an identifier representing the mapping;

maintaining dynamic integrity and automatically synchronizing changes
between the screen component and the corresponding data component and vice
versa in a runtime environment;

selecting the data component mapped by the mapping according to the
mapping identifier;

obtaining a data object field value corresponding to the data field definition
of the mapped data component;

generating a screen element from the screen element definition to include
the data object field value according to the format of the data field definition as
defined in the mapped data component.

39. (previously presented) The method of claim 1 wherein the use of the mapping
reduces the amount of instructions to define the screen component or perform
screen handling.

40. (previously presented) The method of claim 14 further comprising
dynamically defining said data field definition at runtime in response to a format
of said message data object received in said message.

41. (previously presented) The system of claim 18 wherein the use of the
mapping reduces the amount of instructions to define the screen component or
perform screen handling.

42. (previously presented) The system of claim 31 further configured to dynamically define said data field definition at runtime in response to a format of said message data object received in said message.

43. (previously presented) The method of claim 35 wherein the use of the mapping reduces the amount of instructions to define the screen component or perform screen handling.

44. (previously presented) The wireless device of claim 36 wherein the use of the mapping reduces the amount of instructions to define the screen component or perform screen handling.

45. (previously presented) The wireless device of claim 36 wherein a plurality of the data field definitions of the data component is shared between the screen component and the data component as represented by the mapping; and wherein the wireless device further comprises: means for receiving an asynchronous communication message by the device via a network coupled to the device, the message including a message data object and means to dynamically define said data field definition at runtime in response to a format of said message data object received in said message.

46. (previously presented) The computer readable medium of claim 38 wherein the use of the mapping reduces the amount of instructions to define the screen component or perform screen handling.

47. (previously presented) The computer readable medium of claim 38 wherein a plurality of the data field definitions of the data component is shared between the screen component and the data component as represented by the mapping and wherein the instructions further cause the computing device to: receive an

asynchronous communication message via a network coupled to the computing
device, the message including a message data object and dynamically define
said data field definition at runtime in response to a format of said message data
object received in said message.

-   **END OF AMENDMENT –**

Allowable Subject Matter

6.   Claims 1-36 and 38-47 (renumbered as 1-46) are allowed.

7.   The following is an examiner's statement of reasons for allowance:

As pointed out in REMARKS, it stated that "... the cited combinations of Hulai, Warila, Kougiouris, Saulpaugh and Greene do not disclose, teach or otherwise suggest the limitations of independent claims 1, 18, 35, 36, and 38 ..." (see page 12, first paragraph)

Further, as pointed out by Applicant(s), the cited prior arts of record (Hulai et al., Warila, Kougiouris et al., Saulpaugh et al, Greene et al.) taken alone or in combination does not disclose and/or fairly, at least, suggest a method for:

"... operating on a wireless device for <u>generating a screen element</u>, based on a data object, of a component application ... display on a user interface ... including <u>a data component</u> having at least one data field definition and <u>a screen component</u> having at least one screen element definition, the components being defined in a structured definition language ... comprising the steps of:

selecting the screen component corresponding to the screen element selected for display;

identifying at least <u>one mapping</u> present in the screen component, <u>the mapping</u> for specifying <u>dynamic relationships</u> between the <u>screen</u> component and the <u>data</u> component as <u>defined by an identifier</u> <u>representing the mapping</u>;

wherein <u>a mapping manager</u> maintains <u>dynamic data integrity</u> and <u>automatically synchronizes changes</u> between the screen component and the corresponding data component and vice versa <u>in a runtime environment</u>;

selecting the data component <u>mapped by the mapping</u> according to <u>the mapping identifier</u>;

obtaining a data object field value corresponding to the data field definition
of the mapped data component;

generating a screen element from the screen element definition to include
the data object field value according to the format of the data field definition as
defined in the mapped data component", as recited in such manners in
independent claim 1 and similarly recited in independent claims 18, 35, 36 and
38.

8.   Claims (2-17, 39, 40), (19-34, 41, 42), (40), (44, 45), and (46, 47) are
considered allowable by virtue of their dependence on allowable independent
claims 1, 18, 35, 36 and 38 respectively.

9.   Any comments considered necessary by applicant must be submitted no
later than the payment of the issue fee and, to avoid processing delays, should
preferably accompany the issue fee. Such submissions should be clearly labeled
"Comments on Statement of Reasons for Allowance."

Conclusion

10.   Any inquiry concerning this communication or earlier communications from
the examiner should be directed to Ben C. Wang whose telephone number is
(571) 270-1240. The examiner can normally be reached on 8:00-5:30
(EST/EDT), Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the
examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300. Information regarding the status of an application may

be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private

PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see

http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

(toll-free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

/Ben C Wang/

Examiner, Art Unit 2192

/Thuy Dao/

Primary Examiner, Art Unit 2192